U.S. Application No.
None Assigned

International Application No.
PCT/EP98/03734

Attorney Docket No.
KKFI34.001APC

Date: December 20, 1999

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 USC 371

International Application No.:	PCT/EP98/03734
International Filing Date:	June 18, 1998
Priority Date Claimed:	Germany
Title of Invention:	FILLING CONNECTION FOR A GAS CYLINDER VALVE
Applicant(s) for DO/EO/US:	Erwin Weh, Wolfgang Weh

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. (X) This is a **FIRST** submission of items concerning a filing under 35 USC 371.

2. () This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 USC 371.

3. (X) This express request to begin national examination procedures (35 USC 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 USC 371(b) and PCT Articles 22 and 39(1).

4. (X) A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.

5. (X) A copy of the International Application as filed (35 USC 371(c)(2))

   a) () is transmitted herewith (required only if not transmitted by the International Bureau).
   b) (X) has been transmitted by the International Bureau.
   c) () is not required, as the application was filed in the United States Receiving Office (RO/US).

6. (X) A translation of the International Application into English (35 USC 371(c)(2)).

7. (X) Amendments to the claims of the International Application under PCT Article 19 (35 USC 371(c)(3))

   a) () are transmitted herewith (required only if not transmitted by the International Bureau).
   b) () have been transmitted by the International Bureau.
   c) () have not been made; however, the time limit for making such amendments has NOT expired.
   d) (X) have not been made and will not be made.

8. () A translation of the amendments to the claims under PCT Article 19 (35 USC 371(c)(3)).

9. () An oath or declaration of the inventor(s) (35 USC 371(c)(4)).

10. (X) A copy of the International Search Report .

11. (X) A translation of the annexes, such as any amendments made under PCT Article 34, to the International Preliminary Examination Report under PCT Article 36 (35 USC 371(c)(5)).

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Items 11. to 16. below concern other document(s) or information included:

12. () An Information Disclosure Statement under 37 CFR 1.97 and 1.98.

13. () An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

14. (X) A FIRST preliminary amendment.
() A SECOND or SUBSEQUENT preliminary amendment.

15. () A substitute specification.

16. () A power of attorney and/or address letter.

17. (X) International Application as published (first page only).

18. () Small Entity Statement.

19. () PCT Form PCT/IPEA/402.

20. () PCT Form PCT/IB/308.

21. () PCT request form.

22. (X) A return prepaid postcard.

23. (X) The following fees are submitted:

				FEES
	BASIC FEE			$840
CLAIMS	**NUMBER FILED**	**NUMBER EXTRA**	**RATE**	
Total Claims	14 - 20 =	0 ×	$18	$0
Independent Claims	1 - 3 =	0 ×	$78	$0
Multiple dependent claims(s) (if applicable)			$260	$0
	TOTAL OF ABOVE CALCULATIONS		$0	
Reduction by 1/2 for filing by small entity (if applicable). Verified Small Entity statement must also be filed. (NOTE 37 CFR 1.9, 1.27, 1.28)			$	
	TOTAL NATIONAL FEE			$840
	TOTAL FEES ENCLOSED			$840

24. (X) The fee for later submission of the signed oath or declaration set forth in 37 CFR 1.492(e) will be paid upon submission of the declaration.

25. (X) A check in the amount of $ to cover the above fees is enclosed.

26. (X) The Commissioner is hereby authorized to charge only those additional fees which may be required to avoid abandonment of the application, or loss of priority to any prior application or credit any overpayment to Deposit Account No. 11-1410. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

KNOBBE, MARTENS, OLSON & BEAR, LLP
620 Newport Center Drive
Sixteenth Floor
Newport Beach, CA 92660

Lowell Anderson
Signature

Lowell Anderson
Printed Name

30,990
Registration Number

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122099

KKFI34.001APC

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Weh, et al.	) Group Art Unit Unknown
Appl. No.	:	Unknown	)
Filed	:	Herewith	)
For	:	FILLING CONNECTION FOR A GAS CYLINDER VALVE	)
Examiner	:	Unknown	)

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

IN THE SPECIFICATION

Page 1, last paragraph, please delete the entire paragraph beginning with "This object ... dependent claims", and insert the following:

--This object is met by a filling connection having an actuating element and a discharge connection on the valve body of the gas cylinder valve, wherein in addition to the discharge connection a filling union is provided on the valve body. The filling union extends in its longitudinal direction, and actuating element are arranged opposite the discharge connection and at the side on the valve body. Preferred embodiments include having the discharge connection and the filling union arranged at right angles to one another on the valve body. Preferably the filling union is disposed vertically. Preferably a spring-biased check valve is fitted in the discharge connection and blocks in the filling direction. In a further preferred variation of the above combinations, the discharge connection and the filling union each open into a separate or a common through bore in the valve body. The discharge connection and filling union are preferably formed in one piece with the valve body, and the filling union is preferably fitted in

On page 1, last paragraph, please delete the entire paragraph beginning with "This object ... dependent claims", and insert the following:

--This object is met by a filling connection having an actuating element and a discharge connection on the valve body of the gas cylinder valve, wherein in addition to the discharge connection a filling union is provided on the valve body. The filling union extends in its longitudinal direction, and actuating element are arranged opposite the discharge connection and at the side on the valve body. Preferred embodiments include having the discharge connection and the filling union arranged at right angles to one another on the valve body. Preferably the filling union is disposed vertically. Preferably a spring-biased check valve is fitted in the discharge connection and blocks in the filling direction. In a further preferred variation of the above combinations, the discharge connection and the filling union each open into a separate or a common through bore in the valve body. The discharge connection and filling union are preferably formed in one piece with the valve body, and the filling union is preferably fitted in the valve body, especially screwed in. Further, the filling union preferably has an outer annular groove for engagement of a filling coupling. Preferably, the filling union has a company/user specific form for coding, matched to the corresponding filling coupling being used. Moreover, at least one valve, in particular a spring-biased check valve, is preferably fitted in the filling union and blocks in the discharge direction. In the above combinations, the filling union can be coupled to a filling station capable of being automated. Further, the filling station preferably comprises a multiple filling coupling for simultaneous filling of a plurality of gas cylinders. Finally, in the above combinations the filling union preferably has the same outer dimensions and external shape as the discharge connection.--

On page 2, between the third and fourth paragraphs, please insert --Brief Description of the Drawings--.

On page 2, fourth paragraph, line 2, please delete "single" and "(Fig. 1").

On page 2, immediately after the fourth paragraph, please insert --Figure 1 shows a schematic illustration of a gas cylinder.--

On page 4, immediately before the last paragraph, please insert --Detailed Description of the Invention--.

On page 1 of the claims, line 1, please replace "CLAIMS" with --WHAT IS CLAIMED IS:--.

IN THE ABSTRACT:

Please add an abstract as follows:

A filling connection has an actuating element and a discharge connection on the valve body of the gas cylinder valve. In addition to the discharge connection a filling union is provided on the valve body. The filling union extends in its longitudinal direction, and actuating element are arranged opposite the discharge connection and at the side on the valve body. Preferred embodiments include having the discharge connection and the filling union arranged at right angles to one another on the valve body.

IN THE CLAIMS:

Please delete Claims 1, and 3-14. Claim 2 will be deleted in response to the first Office Action.

Please add the following new claims:

15. A filling connection for gas cylinder valves having an actuating element and a discharge connection on the valve body of the gas cylinder valve, comprising a filling union provided on the valve body in addition to the discharge connection, the filling union extending along a longitudinal axis of the filling union, with the actuating element being arranged opposite the discharge connection and at a side of the valve body.

16. The filling connection according to Claim 15, wherein the discharge connection and the filling union are arranged at right angles to one another on the valve body.

17. The filling connection according to Claim 15, wherein the filling union is disposed vertically.

18. The filling connection according to Claim 15, wherein a spring-biased check valve is fitted in the discharge connection so as to block gas flow in the filling direction.

19. The filling connection according to Claim 15, wherein the discharge connection and the filling union each open into a separate through bore in the valve body.

20. The filling connection according to Claim 15, wherein the discharge connection and the filling union each open into a common through bore in the valve body.

21. The filling connection according to Claim 15, wherein the discharge connection and filling union are formed in one piece with the valve body.

22. The filling connection according to Claim 15, wherein the filling union is screwed into the valve body.

23. The filling connection according to Claim 15, wherein the filling union has an outer annular groove for engagement of a filling coupling.

24. The filling connection according to Claim 15, wherein the filling union has a company/user specific form for coding, matched to the corresponding filling coupling being used.

25. The filling connection according to Claim 15, wherein at least one valve, in particular a spring-biased check valve is fitted in the filling union and adapted to block gas flow in the discharge direction.

26. The filling connection according to Claim 15, wherein the at least one valve comprises a spring-biased check valve.

27. The filling connection according to Claim 15, wherein the filling union is adapted to be coupled to a filling station capable of being automated.

28. The filling connection according to Claim 15, wherein the filling union is adapted to be coupled to a multiple filling coupling adapted for simultaneous filling of a plurality of gas cylinders.

29. The filling connection according to Claim 15, wherein the filling union has the same outer dimensions and external shape as the discharge connection.

REMARKS

The foregoing amendments are to more closely conform the application to U.S. practice. No new matter is added. Entry of the amendments is respectfully requested.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 12/20/99

By: Lowell Anderson

Lowell Anderson
Registration No. 30,990
Attorney of Record
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122099

Applicant or Patentee: WEH Erwin et al
Serial or Patent No. :
For: FILLING CONNECTION FOR A GAS BOTTLE VALVE

Attorney's Docket No.:
Filed or Issued:

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) AND 1.27(b) - INDEPENDENT INVENTOR

As a below-named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled FILLING CONNECTION FOR A GAS... , described in:

[X] the specification filed herewith
[ ] application serial no. _____, filed _____
[ ] patent no. _____, issued _____

I have not assigned, granted conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

[ ] no such person, concern, or organization
[ ] persons, concerns or organizations listed below*

* NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27).

FULL NAME:
ADDRESS:
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

FULL NAME:
ADDRESS:
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

FULL NAME:
ADDRESS:
[ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

WEH Wolfgang	WEH Erwin	
NAME OF INVENTOR:	NAME OF INVENTOR:	NAME OF INVENTOR:
Signature of Inventor	Signature of Inventor	Signature of Inventor
14 th Dec. 1999	14 th Dec. 1999	
Date	Date	Date

CVC\\PA-201

KNOBBE, MARTENS, OLSON & BEAR
620 NEWPORT CENTER DR 16TH FLOOR NEWPORT BEACH, CA 92660 (714) 760-0404 FAX (714) 760-9502

Description:

Filling connection for a gas cylinder valve

This invention relates to a filling connection for gas cylinder valves according to the pre-characterizing features of claim 1.

Such a filling connection for gas cylinder valves is known from DE-GM 91 15 142. A filling connection is to be made for gas cylinder valves, especially of acetylene cylinders, with which a safe connection can be produced and undone again rapidly and reliably even by non-technical people, since the fitting position of the filling connection has to be carefully controlled with usual filling connections, which can be really complicated and troublesome for lay persons. Accordingly, in this state of the art a clamp-like connector coupling is provided, in which is mounted a cylinder valve connection piston sleeve, biased in the direction of a fitting ring.

After connection to the cylinder valve, the filling passage through the housing or valve body is opened up. However, after connecting the filling coupling on to the connection union, which later serves also as the discharge connection, the gas cylinder valve must additionally be opened by the handwheel normally provided as the actuating element, and must be closed again after the filling. As well as actuating the filling coupling, at least two further manual operations are necessary, which is very time-consuming in series filling.

Accordingly the invention is based on the object of providing a filling connection for gas cylinder valves with which the filling can be speeded up.

This object is met by a filling connection according to the features of claim 1. Preferred embodiments are the subject matter of the dependent claims.

Through the arrangement of a separate, upwardly pointing filling union on the gas cylinder valve, in addition to the discharge connection on the side, a quick connection coupling can be fitted as the filling coupling, while the handwheel of the gas cylinder valve does not have to be opened separately for the filling. A separate gas filling passage is thus created, which is essentially independent of the discharge passage, while both passages can also open into a common through bore, being separated however in terms of flow technology both during the filling operation and also during discharge operation, in particular by check valves connected in opposition to one another.

A substantial advantage here is that the handwheel arranged on the side of the gas cylinder valve does not have to be opened for the filling, nor does it have to be closed again at the end of the filling operation. Two working steps are thus saved, so that the filling of gas cylinders is substantially speeded up. This applies in particular to automated filling by robots, since the upwardly pointing filling union is also optimally accessible in a tightly packed gas cylinder pallet.

Simultaneous filling of a plurality of gas cylinders by means of a multiple filling coupling is also possible through this, e.g. twelve gas cylinders on a pallet at a time, on to which the multiple filling coupling with twelve filling couplings can fitted from above. The filling operation can be substantially speeded up by this.

An embodiment will be described and explained in more detail below with reference to the single drawing (Fig. 1).

A gas cylinder valve 1 is shown schematically in Fig. 1, with a handwheel as actuating element 2 and a valve body 3. The valve body 3 of the gas cylinder valve 1 is attached to a gas cylinder 10 (e.g. for acetylene, oxygen, carbon dioxide, hydrogen or the like) in the usual way, by a screw connection.

A side discharge connection 4 is formed on the valve body 3, preferably in one piece therewith, with a suitable threaded connection corresponding to the standard for the gas in question. A spring-biased check valve 5 is arranged within the discharge connection 4 and only allows gas discharge in the accordance with the arrow shown, being blocked however in the opposite (filling) direction.

In accordance with the invention, a separate filling union 6 is arranged on the valve body 3, preferably at right angles to the discharge connection 4. The filling union 6 can be screwed into the valve body 3 as a separate component or equally, as shown, be formed in one piece with the valve body 3, like the discharge connection 4. An annular groove 6a is formed in the outer wall of the upwardly pointing filling union 6, in which the detent elements 8a of a filling coupling 8 which can be fitted from above can at connected.

The filling coupling 8 is preferably formed as a plug-in coupling with collet jaws according to EP-A 0 340 879 or DE-A 3 518 019, since appropriate safety provisions for filling gas cylinders are provided with these quick connection couplings of the applicant. However a detent ball coupling for an external profile or even if desired an inner engagement profile can optionally be used as the filling coupling 8, as is basically known from hydraulic connectors.

A spring-biased check valve 7 is also arranged in the filling union 6, namely in the bore shown in broken lines within the filling union 6. The filling union 6 also opens into a through bore 9 like the discharge connection 4, which bore communicates with the gas cylinder 10. A valve spool, not shown here, is arranged in the region of the through bore 9 and can be brought into the closed or open position by means of the handwheel 2.

In the open position of the valve spool, the through bore 9 communicates with the discharge connection 4, so that gas can be discharged, while the filling union 6 is de-coupled by the check

valve 7. After the gas cylinder 10 has largely been emptied, the gas cylinder valve 1 is closed by means of the handwheel 2 and then taken to the filling operation. However filling can also take place on site, e.g. from a tanker vehicle, where the filling coupling 8 is likewise fitted on to the filling union 6 from above and the gas cylinder 10 in question is filled.

The valve spool 2a stays closed in this filling operation, so that the handwheel 2 no longer has to be operated, in contrast to the known devices; in particular the handwheel 2 does not have to be operated in the opposite direction after completion of the filling operation. Rather it is only necessary for the filling coupling 8 to be taken off. The gas lines attached to the discharge connection 4 can even remain attached when filling on site.

The filling union 6 preferably also has a company and/or user specific form, so that only correspondingly matching filling couplings 8 can be attached. This ensures that only authorised persons can undertake the filling of the gas cylinder 10. Filling through the discharge connection 4 is also securely avoided through the spring-biased check valve 5 provided in the side discharge connection 4.

In addition it is made possible through this check valve 5 for the gas cylinder to maintain a certain residual pressure, as is required for operation of various installations or is desirable to avoid entry of air into the gas cylinder 10. Time-consuming evacuation of the gas cylinder 10 when refilling is thereby avoided.

The filling operation can moreover be largely automated, since the upwardly pointing filling union 6 is readily accessible, in particular both for manual handling devices and robots, with which the filling coupling 8 can be fitted on from above. A multiple filling station can also be used, in which the individual filling couplings 8 are suspended in that raster in which the gas cylinders 10 are fixed on a pallet.

(Amended) CLAIMS:

1. Filling connection for gas cylinder valves, especially on acetylene cylinders, with an actuating element (2) and a discharge connection (4) on the valve body (3) of the gas cylinder valve (1), wherein in addition to the discharge connection (4) a filling union (6) is provided on the valve body (3), extending in its longitudinal direction, characterized in that
the actuating element (2) is arranged opposite the discharge connection (4) and at the side on the valve body (3).

2. Filling connection according to claim 1, characterized in that
the discharge connection (4) and the filling union (6) are arranged at right angles to one another on the valve body (3).

3. Filling connection according to claim 1 or 2, characterized in that
the filling union (6) is disposed vertically.

4. Filling connection according to any of claims 1 to 3, characterized in that
a spring-biased check valve (5) is fitted in the discharge connection (4) and blocks in the filling direction.

5. Filling connection according to any of claims 1 to 4, characterized in that
the discharge connection (4) and the filling union (6) each open into a separate or a common through bore (9) in the valve body (3).

6. Filling connection according to any of claims 1 to 5, characterized in that
the discharge connection (4) and filling union (6) are formed in one piece with the valve body (3).

7. Filling connection according to any of claims 1 to 5, characterized in that
the filling union (6) is fitted in the valve body (3), especially screwed in.

8. Filling connection according to any of claims 1 to 7, characterized in that
the filling union (6) has an outer annular groove (6a) for engagement of a filling coupling (8).

9. Filling connection according to any of claims 1 to 8, characterized in that
the filling union (6) has a company/user specific form for coding, matched to the corresponding filling coupling (8) being used.

10. Filling connection according to any of claims 1 to 9, characterized in that
at least one valve, in particular a spring-biased check valve (7) is fitted in the filling union (6) and blocks in the discharge direction.

11. Filling connection according to any of claims 1 to 10, characterized in that
the filling union (6) can be coupled to a filling station capable of being automated.

12. Filling connection according to claim 11, characterized in that
the filling station comprises a multiple filling coupling (8) for simultaneous filling of a plurality of gas cylinders (10).

13. Filling connection according to any of claims 1 to 12, characterized in that
the filling union (6) has the same outer dimensions and external shape as the discharge connection (4).

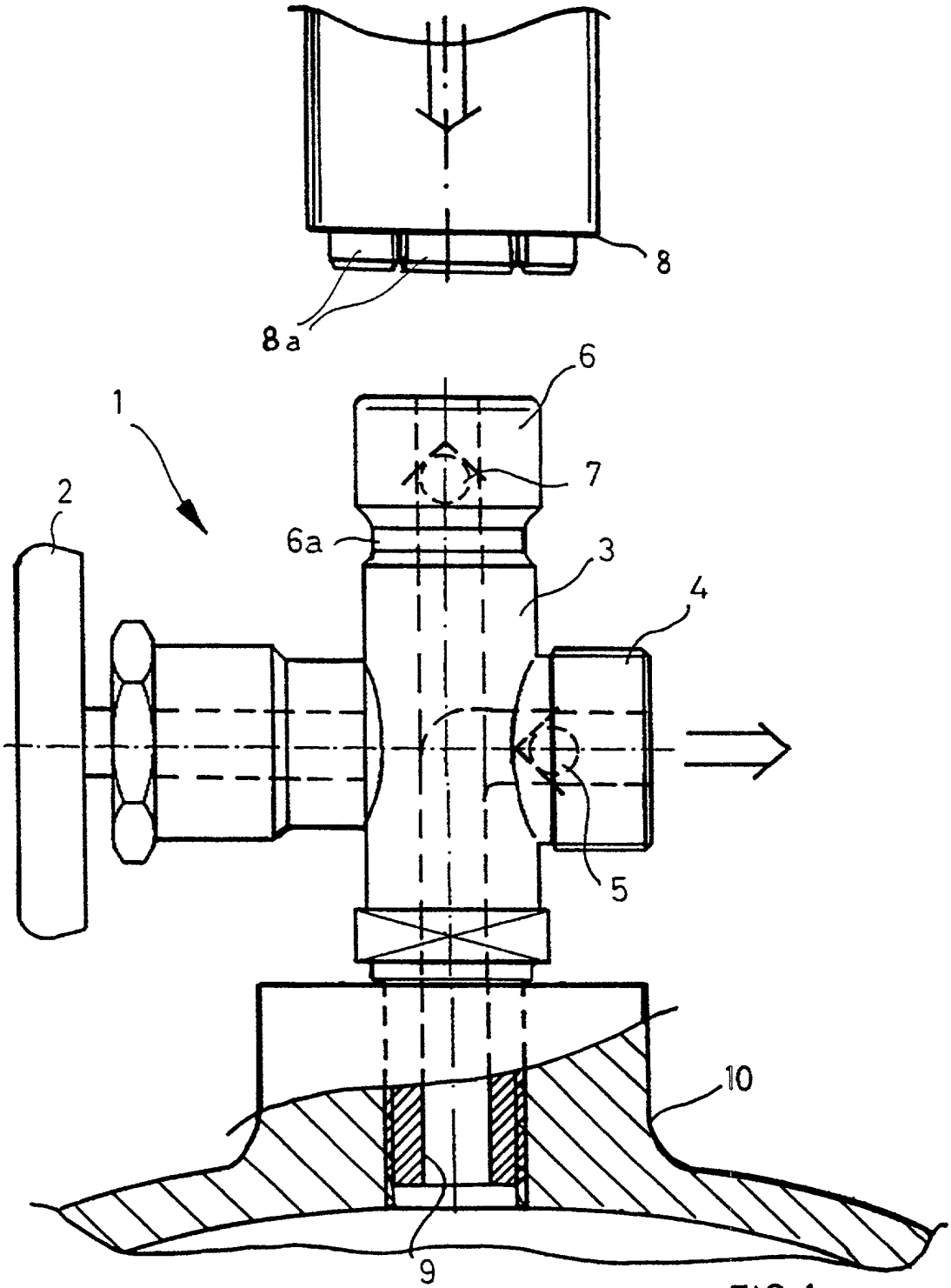

FIG. 1

 Attc /'s Docket No. _____

DECLARATION AND POWER OF ATTORNEY - USA PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled FILLING CONNECTION FOR A GAS BOTTLE VALVE
the specification of which:

(a) ☐ is attached hereto; or

(b) ☐ was filed on _____ as ☐ Serial No. 0 /_____ or ☐ Express Mail No., as Serial No. not yet known _____ and was amended on _____ (if applicable); or

(c) ☒ was described and claimed in PCT International Application No. PCT/EP98/03734 filed on June 18, 1998 and as amended under PCT Article 19 on _____ (if any).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above;

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56;

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent, design or inventor's certificate or any PCT international application(s) listed below and have also identified below any foreign application(s) for patent, design or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed for the same subject matter having a filing date before that of the application(s) of which priority is claimed:

PRIOR FOREIGN APPLICATION(S)

COUNTRY (OR INDICATE IF PCT)	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 U.S.C. § 119
German	297 10 553.1	18.06.1997	☒ YES NO ☐
			☐ YES NO ☐
			☐ YES NO ☐
			☐ YES NO ☐
			☐ YES NO ☐

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below, and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U.S.A. Application(s)

Serial No.: _____ Filing Date: _____ Status: _____

POWER OF ATTORNEY: I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith (if this application is assigned, I acknowledge that the appointed individuals do not represent me, and that instead they represent the assignee): Applicant hereby appoints Louis J. Knobbe, Registration No. 18,780; Don W. Martens, Registration No. 21,107; Gordon H. Olson, Registration No. 20,319; James B. Bear, Registration No. ~~25,221;~~ Darrell L. Olson, Registration No. 28,247; William B. Bunker, Registration No. 29,365; William H. Nieman, Registration No. 30,201; Lowell Anderson, Registration No. 30,990; Arthur S. Rose, Registration No. 28,038; James F. Lesniak, Registration No. ~~25,240;~~ Ned A. Israelsen, Registration No. 29,655; Drew S. Hamilton, Registration No. 29,801; Jerry T. Sewell, Registration No. 31,567; John B. Sganga, Jr., Registration No. 31,302; ~~Edward~~ A. Schlatter, Registration No. ~~32,297;~~ Gerard von Hoffmann, Registration No. 33,043; William C. Rooklidge, Registration No. 31,791; Joseph R. Re, Registration No. 31,291; John M. Carson, Registration No. 34,303; Andrew H. Simpson, Registration No. ~~31,469;~~ Daniel E. Altman, Registration No. 34,115; Anita M. Kirkpatrick, Registration No. ~~32,617;~~ Ernest A. Beutler, Registration No. 19,901; Vito A. Canuso, Registration No. 35,471; William H. Shreve, Registration No. 35,678; Stephen C. Jensen, Registration No. ~~35,556~~; J. John Shimazaki, Registration No. 37,236; Steven J. Nataupsky, Registration No. 37,688; Michael Fedrick, Registration No. ~~36,799;~~ Michael H. Trenholm, Registration No. 37,743; AnneMarie Kaiser, Registration No. 37,649; Darryl A. Smith, Registration No. 37,723; Edward J. Treska, Registration No. 37,744; Nancy Ways Vensko, Registration No. 36,298; Jonathan A. Barney, Registration No. 34,292; John R. King, Registration No. ~~34,362;~~ Richard C. Gilmore, Registration No. 37,335; Bryan C. DeVault, Registration No. 37,304; Stephen S. Korniczky, Registration No. 34,853; Myra H. McCormack, Registration No. 36,602; Raimond J. Salenieks, Registration No. 37,924; Renée E. Canuso, Registration No. ~~36,657~~; Guy L. Cumberbatch, Registration No. 36,114; and Michael L. Fuller, Registration No. 36,516.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or any patent issued thereon.

1 of 2

Full name of sole or first inventor: WEH Wolfgang

Inventor's signature _____ Day 14 Month 12 Year 1999

Attorney's Docket No. _____

Residence (city and country): Siemensstraße 5, 89257 Illertissen, Germany

Citizenship: German

Post Office Address: same as residence

Full name of second inventor: WEH Erwin

Inventor's signature Erwin Day 14 Month 12 Year 1999

Residence (city and country): Siemensstraße 5, 89257 Illertissen, Germany

Citizenship: German

Post Office Address: same as residence

Full name of third inventor: _____

Inventor's signature _____ Day ____ Month _____ Year _____

Residence (city and country): _____

Citizenship: _____

Post Office Address: _____

Send Correspondence To:
KNOBBE, MARTENS, OLSON & BEAR
620 Newport Center Drive
Sixteenth Floor
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(714) 760-0404